



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,108	11/20/2003	Chen Shu	POU920030120US1	9891
23334	7590	11/28/2006	EXAMINER	
FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. ONE BOCA COMMERCE CENTER 551 NORTHWEST 77TH STREET, SUITE 111 BOCA RATON, FL 33487			EBIRIM, EMEKA	
			ART UNIT	PAPER NUMBER
			2166	

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,108

Applicant(s)

SHU ET AL.

Examiner

Emeka Ebirim

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Status

1. This communication is responsive to the Amendments filed on September 1, 2006. The application has been fully examined and claims 1-6, 9-24 are rejected and are pending in this Office Action.

Drawings

2. Applicant's amendments to Fig 2 of the present application have been fully considered and it overcomes the objections applied to the first Office Action. The objections have been withdrawn.

Claim Rejections - 35 USC § 101

3. Applicant's amendments with respect to claims the 101 rejections of claims 17-22 the present application have been fully considered and but it does not overcomes the rejections as applied under 35 USC § 101. As such the rejections is sustained. Amending the claims to recite "storage media" as can be found on page 22 line 8, will help distinguish the claimed elements from the non tangible "communication medium" media on page 22 lines 11-12

Applicant's amendments with respect to claims the 101 rejections of claims 11-16 the present application have been considered and it overcomes the rejections as applied under 35 USC § 101. As such the rejections have been withdrawn.

Claim Rejections - 35 USC § 102

4. Applicant's arguments with respect to claims 1-4, 6, 11-12, 17-18 and 20 of the present application have been fully considered but are not persuasive. The examiner respectfully traverses applicant's arguments.

With respect to the independent claims 1, 11 and 17, Applicants argue that Chidlovskii does not disclose or teach, " 'defined Application Program Interface' for 'sending the question' ".

Examiner notes that Applicants' argue the claims as amended.

In response to the above argument, the Examiner respectfully submits that Chidlovskii discloses the claimed limitation as "For each of the selected information sources (at 202 and/or 208 in FIG. 2), a query translation module 156 (in FIG. 1B) translates (at 210 in FIG. 2) the query (i.e., converts the query into a target query language appropriate for each information source) and performs subsumption if necessary on the query for each of the selected information sources (at 202 or 208 in FIG. 2)" [Col 5 lines 13-20]. ... "For each information source chosen for the query, the query translation module 156 thus translates, if necessary, the meta-search query into a form accepted by each of the selected information sources" [Col 6 lines 5-10].

Applicants further argue that Chidlovskii does not teach or suggest "a ranking by its 'information source' ".

In response to the above argument, the Examiner respectfully submits that Chidlovskii discloses the claimed limitation as "As shown schematically in FIGS. 5A-5B for sources using the Enhanced Boolean Model (EBM), the situation is somewhat

different than for sources using the Vector-Space Model (VSM) shown in FIGS. 4A-4B.

As shown in FIG. 5A, the circle 502 identifies a set of k top-ranked documents”

[Col 11 lines 2-6].

Examiner observes that it is not clear how the Applicants’ invention can influence or enable the ranking of results provided by an independent search service from which the results are received. Perhaps the applicant is claiming the independent source providers to be part of its invention.

With respect to the dependent claim 2, Applicants argue that Chidlovskii does not disclose or teach “sending ... at least one user preference to the plurality of search services”

In response to the above argument, the Examiner respectfully submits that Chidlovskii discloses the claimed limitation as “Automatically and/or depending on the accuracy of the results viewed on user interface 166 (at 222 in FIG. 2), a user may choose to either provide implicit and/or explicit user feedback of the results (received at 220) to the meta-search engine 104 (at 224 in FIG. 2 using module 168). The explicit and/or implicit user feedback is analyzed and used to change ranking parameters (at 226 in FIG. 2 using schema evaluation module 170 in FIG. 1B) [Col 5 lines 49-56]... The information captured over the user search session represents current, pertinent user interests and can be reused for subsequent search sessions. Stored as a profile, this information contains the **user preferences** in the form of information sources most frequently appreciated (positive feedback) by the user” [Col 8 lines 53-61]

Art Unit: 2166

With respect to the claims 4, 12 and 18, Applicants argue that Chidlovskii does not suggest or teach "in dependence ... upon a user specified preference for a number of results to receive"

In response to the above argument, the Examiner respectfully submits that Chidlovskii discloses the claimed limitation as "Finally, the user feedback can change the number k of answers requested from an information source. [Col 12 lines 14-15].

With respect to the claims 6, 14 and 20, Applicants argue that Chidlovskii does not suggest or teach, "maintaining a set of user defined preferences".

In response to the above argument, the Examiner respectfully submits that Chidlovskii discloses the claimed limitation as "pertinent user interests and can be reused for subsequent search sessions. Stored as a profile, this information contains the user preferences in the form of information sources most frequently appreciated (positive feedback) by the user" [Col 8 lines 53-61].

Furthermore independent claims 2-6, 9-10, 23 and 24; 12-16 and 18-22, which depend from claims 1, 11, 17 respectively stand rejected.

For the above reasons, Examiner believed that rejection of the Office action is proper. From the foregoing applicants have not met the requirements needed to traverse the rejections made to this application under 35 U.S.C. 102 (e). And as such rejections as applied to the Office action are hereby sustained.

Claim Rejections - 35 USC § 103

Applicant's arguments with respect to claims 5, 13 and 18; 9-10, 15-16, and 21-22 of the present application have been fully considered but are not persuasive. The examiner respectfully traverses applicant's arguments.

With respect to the claims 5, 13 and 18, Applicants argue that 'Singhal does not suggest or teach "sending, through the defined Application Program Interface and in conjunction with the question, a response timeout value; and retrieving, after a time period corresponding to the response timeout value elapses, the results from the result pool."

In response to the above argument, the Examiner respectfully submits that the combination of Chidlovskii and Singhal discloses the claimed limitation as "Optionally, rather than waiting for the search engine devices 140-160 to return the results, the meta-search engine device 130 may wait for a predetermined period of time and report only the search results returned during the predetermined period of time" [Singhal Col 6 lines 60-65].

Furthermore Examiner notes that in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the claims 9, 15 and 21, Examiner notes that Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general

allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the claims 10, 16 and 22, Applicants argue that the cited references does not suggest or teach "'generating' the specified information in conjunction with 'providing the grammatical information to at least one of the search services'"

In response to the above argument, the Examiner respectfully submits that the combination of Chidlovskii and McConnell discloses the claimed limitation " Decision step 1513 determines whether the dictionary 446 indicates that the current word PWORD of the parsed string is a *noun or adjective* (or an "open" class word). If PWORD is a noun or adjective [McConnell Col 21 lines 10-13] ... as a result of the steps of parsing the string of the natural language query" [McConnell Col 41 lines 39-43].

Examiner once again notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)

For the above reasons, Examiner believed that rejection of the Office action is proper. From the foregoing applicants have not met the requirements needed to traverse the rejections made to this application under 35 U.S.C. 103. And as such rejections as applied to the Office action are hereby sustained.

New claims

5. The new claims 23 and 24 are rejected for reciting subject matter, which are taught and/or suggested by the cited references:

Examiner notes: Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification.

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Reference is made to MPEP 2144.01 - Implicit Disclosure

"[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)

Subsequent to an analysis of the claims it was revealed that a number of limitations recited in the claims belong in the prior art and thus encompassed and/or

implicitly disclosed in the reference (s) applied and cited. It is logical for the examiner to focus on the limitations that are "crux of the invention" and not involve a lot of energy and time for the things that are not central to the invention, but peripheral. The examiner is aware of the duties to address each and every element of claims, however, it is also important that a person prosecuting a patent application before the Office or an stakeholders of patent granting process make effort to understand the level of one of ordinary skill in the (data processing) art or the level one of skilled in the (data processing) art, as encompassed by the applied and cited references. The administrative convenience derived from such a cooperation between the attorneys and examiners benefits the Office as well the patentee.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

8. Claims 17 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 17 – 22 are not limited to tangible embodiments. In view of Applicants' disclosure, specification page 22, line 5 – 15, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., [CD-ROM]) and intangible embodiments (e.g., [wireless communications]).

As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 6, 11-12, 14, 17-18, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Patent No: 6,829,599 to Chidlovskii (hereinafter Childlovskii).

Claim 1.

Chidlovskii discloses:

A method of searching for data, the method comprising the steps of [Col 3 lines 37-40]:

accepting a question from a client [Col 3 lines 41-43];

Art Unit: 2166

sending the question through a defined Application Program to a plurality of search services, wherein each search service within the plurality of search services accepts the question through the defined Application Program Interface that is defined to be the same Application Program Interface for all of the search services within the plurality of search services [query, each information source, Col 3 lines 55-57, Fig 1A-B, Fig 2, Col 5 lines 13-20, Col 6 lines 5-10];

receiving a plurality of results from one or more of the search services, wherein each of the one or more of the search services provides results through the defined Application Program Interface [Col 3 lines 55-57, Fig 1B-2, Col 5 lines 13-20, Col 6 lines 5-10];

receiving, from each of the one or more of the search services, a specification of an associated rank value for each result within the plurality of results, the specification of the associated rank value having been assigned by the respective search service from which the result is received [query, answers (results), results, ranked, information source, Col 3 lines 57-60, Col 5 lines 34-40, Fig 1B-2]; and

adjusting the specification of the associated rank value of at least one result based upon a weight for the search service that assigned the associated specification of the rank value, wherein the weight is assigned by at least one of a client specification and a default weighting specification [rank, ranking parameters, change (adjust), user feedback (client specification), Col 5 lines 49-55, Fig 1B-2].

Claim 2.

Chidlovskii discloses the elements of claim 1 and furthermore it discloses the step of sending through the defined Application Programming Interface and in conjunction with the question, at least one user preference to the plurality of search services [meta-search, user feedback (user preference), Col 5 lines 49-55, Col 5 lines 13-20, Col 6 lines 5-10].

Claim 3.

Chidlovskii discloses the elements of claim 1 and furthermore it discloses the step of receiving through the defined Application Programming Interface, a specification of a maximum rank value possible from each respective search service within the one or more of the search services, wherein the associated specification of the rank value is relative to the maximum rank value possible from the respective search service [top ranked documents, Col 1 lines 61-66, Col 10 lines 57-58, Fig 4b, 5A-B, Col 5 lines 13-20, Col 6 lines 5-10].

Claim 4.

Chidlovskii discloses the elements of claim 1 and furthermore it discloses the step of sending a subset of the results to the client, the subset being selected in dependence upon the associated specification of the rank values of the results after the adjusting step and upon a user specified preference for a number of results to receive [result filtered (subset), Col 5 lines 33-39, Col 8 lines 53-61]].

Claim 6.

Chidlovskii discloses the elements of claim 1 and furthermore it discloses maintaining a set of user defined preferences, wherein the user defined preferences comprise the client specification, and wherein the client specification comprises a user specified weight for at least one search service within the one or more search services [Col 8 lines 53-61, Fig 2 (226), Fig 3], and wherein the weight assigned by the client specification overrides the weight assigned by the default weighting specification [Col 5 lines 53-55].

Claim 7 (Cancelled)

Claim 23. (New)

Chidlovskii discloses the elements of claim 1 and furthermore it discloses: receiving at one of the one or more search services, through the defined Application Program Interface, the question and the at least one user preference (provide explicit and or recorded implicit user feedback; submit query) [(content provider), information sources, Query translation module, (API), Fig 1A-B, Fig 2, query, each information source, Col 3 lines 55-57, Col 5 lines 13-20, Col 6 lines 5-10]; determining, at the one of the one or more search services, at least one result within the plurality of results based upon the question and the at least one user

Art Unit: 2166

preference (provide explicit and or recorded implicit user feedback) [Col 8 lines 53-61, Fig 1A-B, Fig 2-3]; and

sending from the one of the one or more search services the at least one result in accordance with the at least one user preference (provide explicit and or recorded implicit user feedback) [Col 8 lines 53-61, Fig 1A-B, Fig 2-3].

11. Subject matter of claims 11-12, 14, 17-18 and 20 are rejected in the analysis above in claims 1-4, 6 and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5, 13, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chidlovskii in view of Patent No: 6,370,527 to Singhal (hereinafter Singhal).

Claim 5.

Chidlovskii discloses the elements of claim 1 but it does not explicitly indicate the element of claim 5. Singhal disclose the claimed invention wherein the receiving step comprises storing the results in a result pool, and the method further comprises

sending, through the defined Application Program Interface and in conjunction with the question, a response timeout value; and retrieving, after a time period corresponding to the response timeout value elapses, the results from the result pool after a predetermined time [memory, store, results, predetermined period of time, Col 6 lines 60-65, Fig 4, Col 6 lines 38-40].

It would have been obvious to one of ordinary skill in the art of data processing to have combined the cited references because predetermined time as disclosed by Singhal would have enabled Chidlovskii to search all available portions of a distributed network without having to repeatedly reenter their search query [Singhal Col 1 lines 27-30].

14. Subject matter of claims 13 and 19 are rejected in the analysis above in claim 5 and these claims are rejected on that basis.

15. Claims 9-10, 15-16, and 21-22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chidlovskii in view of Patent No: 6,999,963 to McConnell (hereinafter McConnell).

Claim 8. (Cancelled)

Claim 9.

Chidlovskii discloses the elements of claim 1 but it does not explicitly indicate “natural language question”. McConnell discloses the claimed natural language question [See McConnell Col 4 lines 56-57]. McConnell further discloses the parsed representation consists of terms within the natural language query [McConnell Col 39-40, 44-46]

It would have been obvious to one of ordinary skill in the art of data processing to have combined the cited references because “natural language question” as disclosed by McConnell would have enabled Chidlovskii to provide a natural language interface to stored information [See McConnell Col 2 lines 54-65].

Furthermore it would enable Chidlovskii’s system to provide users with easy and robust linguistic and conceptual variation for accessing the database in a more intuitive method [See McConnell Col 2 lines 54-65].

Claim 10.

The combination of Chidlovskii and McConnell discloses the elements of claim 9 as above and furthermore McConnell discloses the step of sending a parsed representation includes the sub-steps of:

generating grammatical information describing the natural language question [See McConnell Col 41 lines 41-46].

wherein the grammatical information comprises at least one of identification of nouns in the natural language question, identification of verbs in the natural language

Art Unit: 2166

question and identification of at least one of adjectives and adverbs in the natural language question [See McConnell Col 41 lines 41-46 Col 21 lines 10-13]; and
providing the grammatical information to at least one of the search services [See McConnell, Col 41 lines 62-64].

Claim 24. (New)

The combination of Chidlovskii and McConnell discloses the elements of claim 10 as above and furthermore McConnell discloses wherein the grammatical information comprises an identification of nouns in the natural language question, an identification of verbs in the natural language question and an identification of at least one of adjectives and adverbs in the natural language question, the method further comprising [See McConnell Col 41 lines 41-46 Col 21 lines 10-13]:

receiving at one of the one or more search services, through the defined Application Program Interface, the grammatical information [See McConnell Col 41 lines 41-46];

evaluating, at the one of the one or more search services, the natural language question by assigning high weight to nouns, medium weight to verbs and low weight to adjectives and adverbs [ranking, weights, McConnell Col 25 lines 55-57, 64-67-Col 26 lines 1-2, Fig 11A-B]

determining, at the one of the one or more search services, at least one result within the plurality of results based upon the evaluating the natural language query [See McConnell Col 10 lines 1-15]; and

sending from the one of the one or more search services the at least one result in accordance with the at least one user preference [See McConnell Col 10 lines 1-15].

16. Subject matter of claims 15-16, and 21-22 are rejected in the analysis above in claims 8-10 and these claims are rejected on that basis.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emeka Ebirim whose telephone number is 571-272-3994. The examiner can normally be reached on 8:30pm - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam, can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Emeka Ebirim
Examiner
Art Unit 2166


HOSAIN ALAM
SUPERVISORY PATENT EXAMINER